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**PATENT**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the Matter of the Application of: F. Liu

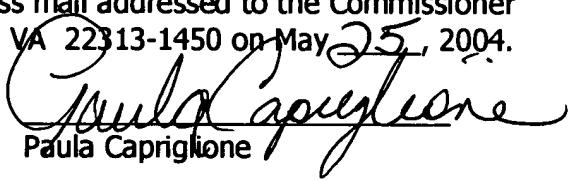
For: Electromagnetic Wave Transmitter, Receiver and Transceiver Systems,  
Methods and Articles of Manufacture

Serial No.: 10/624,312 Filed: July 22, 2003

Examiner: Unknown Group Art Unit: 2817

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the  
United States Postal Service as first class mail addressed to the Commissioner  
for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 25, 2004.



Paula Capriglione

**INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER**

Sir:

In fulfilling the duty of candor and good faith, the following documents  
are hereby disclosed to the Patent Office in accordance with 37 CFR § 1.56. It is  
not admitted that the information in the listed documents is material to  
patentability as defined in 37 CFR § 1.56(b). The Examiner is requested to  
consider the documents in the examination of this application.

An Information Disclosure Statement by Applicant (PTO Form 1449) is  
submitted herewith, in duplicate, pursuant to 37 CFR §§1.97-1.98. The  
Examiner is requested to return an initialed and signed copy of the form once  
the documents have been considered.

The enclosed statement is being filed before the mailing date of a first  
Office Action on the merits.

The documents listed on the accompanying Form PTO-1449 were cited by  
the European Patent Office in the International Search Report for International  
Application No. PCT/US03/32024 which is a counterpart for this application. The

documents were cited in categories "X" ("document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone") and "A" ("document defining the general state of the art which is not considered to be of particular relevance"). A copy of the International Search Report is attached.

A copy of each of the documents is being submitted.

If a fee is due in connection with this communication the Commissioner is authorized to charge any fee or additional fee due in connection with this communication to Deposit Account No. 23-1950.

Respectfully submitted,

F. Liu  
Applicant

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FORM PTO-1449  
(Rev. 2-32)U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANTATTY. / DOCKET NO. / SERIAL NO.  
MA / 17973 / 10/624,312APPLICANT  
F. LiuFILING DATE / GROUP  
7/22/03 / 2817

## U. S. PATENT DOCUMENTS

EXAM INIT		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FIL. DATE
	AA	6,411,655	6/02	Holden et al.	375	269	12/98
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRNS Y/N
	AK						
	AL						
	AM						
	AN						
	AO						

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AP	VANDERAAR M ET AL. "Transmit pulse shaping filters and CORDIC algorithm based precompensation for digital satellite communications" August 18-21, 1996, vol. 3, 1996, pages 1219-1222, XP002159076.
AR	WESTE N ET AL. "Broadband U-NII wireless data" 4 January 1998 (1998-01-04), pages 72-77 XP010263408.
AS	VOLDER J E "The Cordic Trigonometric Computing Technique" vol. EC-8, No. 3, September 1959 (1959-09) pages 330-334, XP000565555

Examiner:

Date Considered:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.